

WE CLAIM:

1. A method of controlling an automotive transmission having at least one shaft, at least one gear set operatively coupled to the shaft and adapted to provide low and reverse gear ratios where the gear set includes a sun gear operatively coupled to a source of torque in the transmission assembly, a ring gear mounted for rotation about the sun gear and a plurality of pinion gears supported by a carrier for meshing rotation about the sun gear and between the ring gear and the sun gear with the carrier operatively coupled to the shaft, a friction clutch assembly having a clutch pack that acts as a holding device and a one way clutch assembly interposed between the friction clutch assembly and the gear set, said method including the steps of:

selecting a low gear ratio provided by the gear set;

actuating the friction clutch to ground the outer race of the one way clutch assembly and thus the ring gear to the transmission housing;

providing torque to the sun gear to drive the pinion gears in meshing relationship about the sun gear to transfer torque at a reduced ratio to the carrier and the shaft;

maintaining activation of the friction clutch assembly until the peak torque transmitted through the gear set has been reached; and

reducing the load capacity of the friction clutch assembly while the transmission assembly is still in the low gear ratio defined by the gear set and so that the one way clutch assembly acts as the sole holding device on the ring gear of the gear set such that a non-synchronous shift from the low gear to the high gear may be effected.

2. The method of controlling an automotive transmission as set forth in claim 1 wherein the friction clutch is actuated to ground the outer race of the one way clutch assembly and thus the ring gear to the transmission housing during vehicle launch.
3. The method of controlling an automotive transmission as set forth in claim 1 wherein the step of reducing the lead capacity of the friction clutch assembly includes the step of releasing the friction clutch assembly such that the clutch pack is disengaged.
4. The method of controlling an automotive transmission as set forth in claim 1 further including the step of shifting the transmission assembly to a higher gear.
5. The method of controlling an automotive transmission as set forth in claim 4 wherein the step of shifting the transmission to a higher gear includes shifting the transmission from first gear to second gear.